



FORM HDP-1449 (Based on Form PTO-1449)

**PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION**

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Sheet 1 of 6

ATTORNEY DOCKET NO.

SERIAL No.

1736-000001/REC

10/643,673

APPLICANT

Hyon et al.

FILING DATE

GROUP

August 19, 2003

~~3864~~ 1711**U.S. PATENT DOCUMENTS**

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	AB	3,886,056*	05/27/1975	Kitamaru et al.		
2.		4,224,696*	09/30/1980	Murray et al.		
3.		4,587,163*	05/6/1986	Zachariades		
4.		4,636,340*	01/13/1987	Itaba et al.		
5.		4,655,769*	4/7/1987	Zachariades		
6.		4,747,990*	5/31/1988	Gaussens et al.		
7.		5,030,402*	7/9/1991	Zachariades		
8.		5,030,487*	7/9/1991	Rosenzweig		
9.		5,066,755*	11/19/1991	Lemstra		
10.		5,130,376*	7/14/1992	Shih		
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14.		5,428,079*	6/27/1995	Bastiaansen et al.		
15.		5,728,748*	3/17/1998	Sun et al.		
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18.		3,956,253	5/11/1976	Braun		
19.		4,055,862	11/1/1977	Farling		
20.		4,171,338	10/16/1979	Mason		
21.	AB	4,281,420	8/4/1981	Raab		

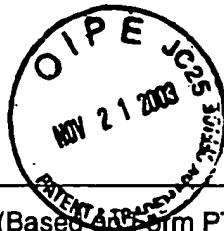
Examiner:

Susan Berman

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12-28-04

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U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
22.	AB	4,582,656	4/15/1986	Hoffman		
23.		5,200,439	4/6/1993	Asanuma		
24.		5,210,130	5/11/1993	Howard, Jr.		
25.		5,414,049	5/9/1995	Sun et al.		
26.		5,439,949	8/8/1995	Lucas et al.		
27.		5,449,745	9/12/1995	Sun et al.		
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35.		6,165,220	12/26/2000	McKellop et al.		
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40.		6,365,089 B1	4/2/2002	Krebs et al.		
41.	AB	6,458,727 B1	10/1/2002	Jones et al.		

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~~3864~~ 1711**U.S. PATENT DOCUMENTS**

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
42.	AB	2002/0125614 A1	09/12/02	King et al.		
43.		2002/0037944 A1	03/28/02	Shen et al.		
44.		2003/0119935 A1	06/26/03	Merrill et al.		
45.		6,494,917 B1	12/17/02	McKellop et al.		
46.		6,355,215 B1	03/12/02	Poggie et al.		
47.		2002/0107300 A1	08/08/02	Saum et al.		
48.		2002/0161438 A1	10/31/02	Scott et al.		
49.		2003/0045603 A1	03/06/03	Salovey et al.		
50.		2003/0130743 A1	07/10/03	Scott et al.		
51.		2003/0149125 A1	08/07/03	Muratoglu et al.		
52.		6,048,480	04/11/00	Doyle		
53.	AB	6,146,426	11/14/00	Doyle		

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Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.	AB	JP 57-211347	12/25/1982	Japan		X	
2.		JP 91 22222	5/13/1997	Japan		Abstract	
3.		WO 95/06148*	3/2/1995	PCT			
4.		WO 98/01085	1/15/1998	PCT			
5.	AB	JP 62 243634	10/24/1987	Japan		Abstract	

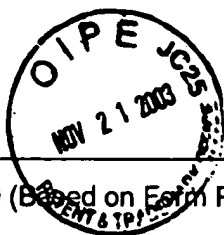
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Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
6.	AB	JP 4-198201	7/17/1992	Japan		Abstract	
7.		EP 0 729 981 A1	9/4/1996	Europe			
8.		JP 5-507748	11/4/1993	Japan		Abstract	
9.	AB	JP 2-175137	7/6/1990	Japan		Abstract	

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1.	AB	Choudhury et al., "The effects of irradiation and ageing on the abrasive wear resistance of ultra high molecular weight polyethylene," Wear 203-204 (1997), pp. 335-340.
2.		International Search Report, PCT/US97/11947 - included in WO 98/01085.
3.		Kang et al., "The Radiation Chemistry of Polyethylene. IX. Temperature Coefficient of Cross-Linking and Other Effects," Journal of the American Chemical Society, Vol. 89:9, April 26, 1967, pp. 1980-1986.
4.		Kitamura, R. et al., "The Properties of Transparent Film Made from Linear Polyethylene By Irradiation Cross-Linking," Macromolecules, vol. 6, 1973, pp. 337-343.*
5.		Kitamura, R. et al., Structure and Properties of Lightly Crosslinked Crystalline Polymers Crystallized or Processed under Molecular Orientation, Journal of Polymer Science: Macromolecular Reviews, vol. 14, 1979, pp. 207-264.*
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7.	AB	O'Neill et al., "The distribution of oxidation products in irradiated ultra-high molecular weight polyethylene," Polymer Degradation and Stability (Feb. 1995), pp. 239-244.

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~~3864~~ 1711**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

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8.	AB	Oonishi et al., "Effect of cross-linkage by gamma radiation in heavy doses to low wear polyethylene in total hip prostheses," Journal of Materials Science: Materials in Medicine 7 (1996), pp. 753-763.
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10.		Polymer Society, Polymer Functional Material Series-Medical Treatment Functional Material, Vol. 9, November 20, 1990, pp. 165-166.
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12.		Premnath, "Gamma sterilization of UHMWPE articular implants: an analysis of the oxidation problem," Biomaterials, Vol. 17 No. 18 (1996), pp. 1741-1753.
13.		Sun et al., "Development of an Accelerated Aging Method For Evaluation of Long-term Irradiation Effects on UHMWPE Implants," (1996), Howmedia Inc., Pfizer Hospital Products Group, pp. 969-970.
14.		Supplementary European Search Report, EP 95931434, December 28, 1998 - corresponds to EP 0729981.
15.		The American Academy of Orthopaedic Surgeons, "Polyethylene: The Past, Present and Future," 1999 Annual Meeting - Scientific Program, February 5, 1999, www.aaos.org/wordhtml/anmett99/sciprogram/g.htm (20 pages).
16.		The American Academy of Orthopaedic Surgeons, "Researchers get awards for orthopaedic research," News Release, March 19, 1998, www.aaos.org/wordhtml/press/98press/kappa.htm (4 pages).
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18.	AB	Tribology Laboratory information sheet and curriculum vitae for Drs. McKellop and Shen, www.orthohospital.org/research/Tribology Lab (5 pages).

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OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

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19.	<i>AB</i>	Wilson et al., "Proton Modification of Ultra High Molecular Weight Polyethylene to Promote Crosslinking for Enhanced Chemical and Physical Properties," Materials Research Society Symposium Proceedings, Vol. 396 (1995), pp. 311-316.

* Indicates previously cited in original U.S. Patent 6,168,626.

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